MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2015/2016

HPC2011 – INTRODUCTORY COURSE IN PHARMACOLOGY

(All sections / Groups)

07 OCT 2015
2.30 p.m – 4.30 p.m
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 3 pages with 8 Questions only.

2. Attempt **SEVEN** out of **EIGHT** questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please print all your answers in the Answer Booklet provided.

Question 1

a. Define Receptors and list 4 types of receptor found in human body.

[4 marks]

b. Describe three channels and how the appropriate antagonist acts.

[6 marks]

Question 2

a. "Barbiturates and benzodiazepines have similar clinical application and mode of action". Compare these two class of drugs in term of their; 1. Therapeutic Index, 2. Rapid Eye Movement (REM) sleeps, 3. Tolerance, 4. Dependency and 5. Metabolism. Based on your comparison, decide which drug is safer for treatment of anxiety?

[5 marks]

b. For what condition(s) are these drugs usually prescribed? How do they work?

[4 marks]

c. What adverse effects can occur?

[1 mark]

Question 3

a. What is the mechanism of action of nitroglycerin?

[3 marks]

b. Why is it useful for the treatment of angina?

[3 marks]

c. What side effects might it cause?

[2 marks]

d. How is it normally given to a patient, and why?

[2 marks]

Question 4

a. Various factors in old people influence the way that drugs affect them. List and describe some such factors.

[6 marks]

b. Older people may experience side-effects which do not appear in younger people. Describe and explain at least 2 such side-effects.

[4 marks]

Continued...

Question 5

a. What different classes of drugs reduce pain?

[3 marks]

b. How do they act?

[3 marks]

c. What are the advantages and disadvantages of each?

[4 marks]

Question 6

a. How do cytostatic drugs work against cancer? (2 main groups)

[4 marks]

b. What types of cancer are most susceptible to these drugs?

[3 marks]

c. What are their side-effects? Why do they happen?

[3 marks]

Question 7

a. Describe cholinergic receptors in the autonomic nervous system – where are they found?

[3 marks]

b. What do they normally do in, for example, heart, lung, glands, gastrointestine, eyes, penis?

[5 marks]

c. Name at least 2 drugs that affect them.

[2 marks]

Question 8

Describe the mechanism of action of THREE antibiotics (anti-bacterial drugs)

[10 marks]

End of Paper